

## REMARKS

Claims 1-8, 19-31 and 40-83 are currently pending. Claims 1, 40-41, 48-49 and 54 have been amended to place the claims in better condition for allowance. New claims 59-83 have been added. Support for these amendments can be found on at least pages 24-25, 28-30, and 39-42 and in U.S. Application No. 09/234,038, filed January 19, 1999, now U.S. Patent No. 6,162,055, which was incorporated by reference on page 24, lines 9-10. The specification has been amended to include a claim for priority. Applicant respectfully submits that no new matter has been added by way of this amendment.

In the Office Action dated August 15, 2002, the Office set forth the following rejections:

- (i) claims 1, 2, 4, 5, 19 and 23-26 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Murljadic (U.S. Patent No. 5,766,006) in view of Roggenkamp (U.S. Patent No. 4,448,307) and Weintraub (U.S. Patent No. 4,095,379);
- (ii) claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Murljadic in view of Roggenkamp and Weintraub, further in view of Migurski et al. (U.S. Patent No. 5,964,065);
- (iii) claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Murljadic in view of Roggenkamp and Weintraub, further in view of Kutsch (U.S. Patent No. 6,149,895);
- (iv) claims 20-22 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Murljadic in view of Roggenkamp and Weintraub, further in view of Cornell (U.S. Patent No. 5,032,178);
- (v) claim 27 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Murljadic in view of Roggenkamp and Weintraub, further in view of Prencipe *et al.* (U.S. Patent No. 5,698,182);
- (vi) claims 40 and 43 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem (U.S. Patent No. 5,813,854);
- (vii) claims 41, 42, 45 and 46 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem, further in view of Kutsch;
- (viii) claims 44 and 47 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem, further in view of Yarborough (U.S. Patent No. 5,713,738);

(ix) claim 48 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem further in view of Kutsch and Pellico (U.S. Patent No. 5,928,628);

(x) claim 49 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem, further in view of Murljadic;

(xi) claim 28 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell in view of Nikodem, further in view of Prencipe *et al.*;

(xii) claim 29 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Cornell, in view of Nikodem and Yarborough, further in view of Pellico;

(xiii) claims 41, 43 and 48 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Montgomery *et al.* (U.S. Patent No. 6,162,055), Montgomery *et al.* (U.S. Patent No. 6,343,933) or Cipolla (U.S. Patent No. 6,416,319);

(xiv) claims 45 and 46 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Montgomery *et al.* (U.S. Patent No. 6,162,055), Montgomery *et al.* (U.S. Patent No. 6,343,933) or Cipolla, further in view of Kutsch;

(xv) claim 49 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Montgomery *et al.* (U.S. Patent No. 6,162,055), Montgomery *et al.* (U.S. Patent No. 6,343,933) or Cipolla (U.S. Patent No. 6,416,319), further in view of Murljadic;

(xvi) claims 40, 42, 44 and 47 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Montgomery *et al.* (U.S. Patent No. 6,162,055); and

(xvii) claims 40-48 were rejected under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-21 of Cipolla (U.S. Patent No. 6,416,319) in view of Kutsch;

(xviii) claim 49 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over claims 1-21 of Cipolla in view of Murljadic.

These rejections are respectfully traversed. Reconsideration of these rejections is hereby requested.

#### ***I. Rejections under 35 U.S.C. § 103(a)***

It is well established that the burden of establishing a *prima facie* case of obviousness lies with the Office. In determining obviousness, one must focus on the invention as a whole. *See In re Keuhl*, 475 F.2d 658, 177 U.S.P.Q. 250 (C.C.P.A. 1973); *Symbol Technologies Inc. v. Opticon Inc.*, 935 F.2d 1569, 19 U.S.P.Q. 2d 1241 (Fed. Cir. 1991). Thus, “[i]n determining the difference between the prior art and the claims, the question under 35 U.S.C.

103 is not whether the differences *themselves* would have been obvious, but whether the claimed invention *as a whole* would have been obvious. See MPEP 2141.02 (emphasis in original).

The Federal Circuit and the Board of Patent Appeals and Interferences have repeatedly emphasized that “[a]n examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant’s invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done.” *Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1301-02 (Bd. Pat. App. & Int. 1993). See also, *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992) (“The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.”).

The Office cannot use hindsight to reconstruct Applicants’ invention from various non-analogous sources. As the Federal Circuit stated in *In re Oetiker*, “[t]he combination of elements from non-analogous sources, in a manner that reconstructs the applicant’s invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant’s invention itself.” 977 F.2d 1443, 1446, 24 U.S.P.Q.2d 1443, 1446 (Fed. Cir. 1992). *ATD Corporation v. Lydall, Inc.*, 159 F.3d 534, 546, 48 U.S.P.Q. 2d 1321, 1329 (Fed. Cir. 1998) (“[d]etermination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.”).

In this instance, the Office has compiled a hodgepodge of prior art to reconstruct Applicants’ invention based on Applicants’ disclosure, which the Office may not properly do. As the Board of Patent Appeals and Interferences stated in *Ex parte Hiyamizu*:

“Under 35 U.S.C. 103 where the examiner has relied on the teachings of several references, the test is whether or not the references viewed individually and collectively would have suggested the claimed invention to the person possessing ordinary skill in the art. It is to be noted, however, that citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. ... Furthermore, it is well settled that where the claimed invention solves a problem, the discovery of the source of the problem and its solution are considered to be part of the ‘invention as a whole’ under 35 U.S.C. 103.”

10 U.S.P.Q.2d 1393, 1394-95 (B.P.A.I. 1988) (internal citations omitted); *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998) (“rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be ‘an illogical and inappropriate process by which to determine patentability.’”)

**A. Art Cited by The Office**

As set forth above, the Office has set forth 16 rejections under 35 U.S.C. § 103(a) in view of various combinations of 11 separate references. These rejections are respectfully traversed.

Applicants respectfully submit that none of the 11 references alone or any of the 16 combinations of references teach or suggest the subject matter of the claimed invention. The Office has improperly reconstructed the claimed invention from selected pieces of prior art with the benefit of hindsight using Applicants’ claims and disclosure as a guide. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051-52, 5 U.S.P.Q.2d 1434, 1438 (Fed. Cir. 1988); *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988) (“One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”); *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (B.P.A.I. 1985) (“It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness.”)

Nowhere in the long list of rejections does the Office submit any evidence of a motivation to combine the ten separate references to arrive at Applicants’ invention. Instead, the Office merely submits blanket statements that it would be “obvious to one of ordinary skill in the art to modify the above combination” or that the modification “is an obvious matter of choice” to one ordinarily skilled in the art, as support for the combinations of references. Applicants submit that the Office incorrectly relies on the skill of the art to provide evidence of the motivation to combine the references, which it cannot properly do. *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1324, 50 U.S.P.Q.2d 1161, 1171 (Fed. Cir. 1999) (“Rarely, however, will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment.”); *Levengood*, 28 U.S.P.Q.2d at 1302 (“That which is within the capabilities of one skilled in the art is not synonymous with obviousness.”).

Not only has the Office failed to demonstrate any teaching, suggestion or motivation to combine the ten references, the Office has erroneously relied on references which one

ordinarily skilled in the art *at the time of Applicants' invention* would not look to for a solution to Applicants' problem. Thus, the rejections under 35 U.S.C. § 103(a) are improper and withdrawal is respectfully requested.

**(i) Murljadic**

Murljadic is directed to the problem of reliably determining the “shade” of a tooth in patients seeking reconstructive work, such as bonding or filling, or before or after tooth whitening. (Column 1, line 1, through column 2, line 17). Murljadic solves the problem of reliably determining the shade of a tooth by providing a shade analyzer system which determines the shade of a patient's tooth using an intraoral camera connected to a shade analyzer subsystem, such as a digital video processor and a color display monitor.

The Office states that Murljadic shows steps for whitening teeth. Applicants respectfully submit that Murljadic does not teach or disclose any steps for whitening teeth. Instead, Murljadic shows a method for reliably determining tooth shade. In fact, Murljadic only mentions tooth whitening as *a single step in a multi-step method* for reliably determining the shade of a tooth before and after the patient's teeth are cosmetically whitened using a shade analyzer system. No procedures or specific methods for tooth whitening are disclosed or suggested. Murljadic is not directed to the problem of maximizing the ability of a tooth whitening facility to provide tooth whitening services in a consistent and reliable manner such that dental office resources are conserved or to improving tooth whitening procedures. As such, Murljadic does not even teach or suggest any specific methods of tooth whitening, and especially does not teach or suggest methods of providing tooth whitening to a plurality of clients.

**(ii) Roggenkamp**

Roggenkamp is directed to the problem of providing a “portable dispenser or holder which provides for convenient storage and utilization of instruments and supplies used by a dentist.” (Column 1, lines 8-11). Roggenkamp solves this problem by providing a multi-compartmented container appropriate for storing dental burs or other rod-like dental tools. (See, e.g., column 2, lines 23-30 and claims 1-12). Roggenkamp does not so much as mention tooth whitening in any form.

The Office argues that Roggenkamp teaches that it is known that a dentist simultaneously provides treatment to more than one patient. Applicants respectfully submit that the exact wording of Roggenkamp is “practically simultaneously.” (Column 1, lines 26-27). Furthermore, as the statement is disclosed in the context of changing the bur in the drill

or reaching for dental supply items with one hand while the other hand is positioned in proximity to the mouth of the patient, it is clear that the dentist cannot possibly be treating two or more patients simultaneously unless the dentist has more than two hands. As such, Roggenkamp does not teach or suggest methods of tooth whitening or methods of providing tooth whitening to a plurality of clients, wherein at least a portion of the tooth whitening procedure is provided to each client simultaneously.

**(iii) Weintraub**

Weintraub is directed to the problem of supplying ophthalmologists and optometrists with a rotatable ophthalmic table which carries the instruments necessary for an examination in each examination room. (See, e.g., column 1). Weintraub solves this problem by developing a rotatable ophthalmic table that is mounted in a wall separating the examination rooms, so that the table can be used in each examination room. (See, e.g., column 1, lines 59-68).

The Office argues that Weintraub shows different workstations. Applicants respectfully submit that Weintraub is directed to ophthalmic and optometric procedures, not dental procedures. In addition, Weintraub teaches the use of a rotatable ophthalmic table and does not so much as mention tooth whitening or maximizing the ability of a tooth whitening facility to provide tooth whitening services in a consistent and reliable manner such that dental office resources are conserved.

**(iv) Migurski**

Migurski is directed to the problem of providing life-saving and stabilizing treatment to trauma victims as close as possible to the site of injuries. Migurski solves this problem by designing an advanced mobile surgical suite system that can be brought close to the site of injuries. Migurski does not so much as mention tooth whitening.

The Office cites Migurski as teaching that patients can be evaluated at removed locations. Applicants respectfully submit that Migurski is directed to an advanced mobile surgical suite system deployed and utilized at the scene of a disaster or accident, not to maximizing the ability of a tooth whitening facility to provide tooth whitening services in a consistent and reliable manner such that dental office resources are conserved or to improving tooth whitening procedures.

**(v) Kutsch**

Kutsch discloses a tooth whitening composition and method that comprise a red dye. Applicants respectfully submit that Kutsch does not disclose or suggest and, in fact, teaches away from, the subject matter of Applicants claimed invention. Applicants claim a method of

providing tooth whitening services to a plurality of clients wherein at least a portion of the tooth whitening procedure is provided to each client simultaneously, and methods of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client. Kutsch requires the treatment of each tooth separately. At, e.g., column 9, lines 21-29, and the Examples, Kutsch discloses irradiation of each tooth one at a time. Furthermore, a dental professional practicing the method of Kutsch could not simultaneously administer tooth whitening to more than one patient because the dental professional must attend to the patient and hold the handpiece 3 to 5 mm from the tooth and must expose each tooth in sequence to the light for 60 seconds while holding the handpiece. (Column 12, lines 5-12). As such, Kutsch does not teach or suggest methods of providing tooth whitening services to a plurality of clients wherein at least a portion of the tooth whitening procedure is provided to each client simultaneously, or methods of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client.

**(vi) Cornell**

Cornell is directed to a specific composition for bleaching teeth. The Office submits that Cornell discloses a treatment time of 5-15 minutes. Cornell implicitly recognizes that variability in tooth whitening compositions may be reflected in treatment time, disclosing a 5 to 15 minute treatment time specific “for the composition of the present invention.” (column 3, lines 44-45. The composition of Cornell is a distinct from Applicants’ composition. Furthermore, the Office acknowledges that “Cornell does not show applying the gel to all cosmetically visible teeth and does not show applying light to all said teeth simultaneously.” (Office Action of August 15, 2002, page 4, third paragraph). As such, Cornell does not teach or suggest methods of providing tooth whitening services to a plurality of clients wherein at least a portion of the tooth whitening procedure is provided to each client simultaneously, or methods of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client.

**(vii) Prencipe**

Prencipe is directed to a method of inhibiting dental calculus. Prencipe merely discloses specific calcium alumina compounds having calcium peroxide with, optionally, a plethora of additives, which optionally include flavoring agents. Prencipe et al., either alone or in combination with the references already discussed, does not teach or suggest the combination of flavoring agents in a composition in a method of providing tooth whitening services to a plurality of clients wherein at least a portion of the tooth whitening procedure is

provided to each client simultaneously, or in a method of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client.

**(viii) Nikodem**

Nikodem is directed to a device for quickly and efficiently bonding braces to a patient's teeth. The device of Nikodem bonds braces to patients' teeth using light to cure the adhesives that adhere the braces to the tooth surfaces. Nikodem does not teach, enable, disclose or suggest methods for providing tooth whitening services to a plurality of clients or methods of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client.

**(ix) Yarborough**

Yarborough is directed to a method for whitening teeth. Yarborough discloses isolating the gums from the chemical bleaching compounds, preferably using wax-like strips applied to the gums. Yarborough does not teach or suggest methods of providing tooth whitening services to a plurality of clients.

**(x) Pellico**

Pellico is directed to a two-component dental bleaching system wherein the components are admixed and applied to the teeth from a dental bleaching tray which is worn by the patient at night while the patient sleeps. Pellico does not teach or suggest methods of providing tooth whitening services to a plurality of clients, or methods of administering tooth whitening services comprising applying a whitening gel to all of the cosmetically visible teeth of a client and applying light to the teeth.

**(xi) Cipolla**

Cipolla issued on June 9, 2002, which is after Applicants' filing date. Cipolla is therefore not a proper prior art reference for a rejection under 35 U.S.C. § 103(a).

In view of the above, Applicants respectfully submit that the Office has improperly reconstructed the claimed invention from selected pieces of prior art with the benefit of hindsight using Applicants' claims and disclosure as a guide. As such, the rejections under 35 U.S.C. § 103(a) are improper and withdrawal of these rejections is respectfully requested.



***II. Rejections under 35 U.S.C. § 102(e)***

The Office rejected claims 40, 42, 44 and 47 under 35 U.S.C. § 102(e) as allegedly anticipated by Montgomery *et al.* (U.S. Patent No. 6,162,055). This rejection is respectfully traversed.

Applicants' have amended their priority claim to claim priority to Montgomery *et al.* As such, Montgomery *et al.* cannot be used as a reference under 35 U.S.C. § 102(e) and withdrawal of the rejection is respectfully requested.

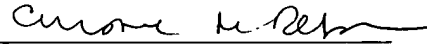
***III. Rejections under the judicially created doctrine of obviousness-type double patenting***

The Office rejected claims 40-48 under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-21 of Cipolla (U.S. Patent No. 6,416,319) in view of Kutsch. This rejection is respectfully traversed; however, in order to facilitate prosecution, Applicants will submit a terminal disclaimer at such time as allowable subject matter in the present case is obtained.

**CONCLUSION**

With entry of the above Amendment and in view of the foregoing remarks, it is respectfully submitted that claims 1-8, 19-31 and 40-83 are in condition for allowance. It is respectfully submitted in view of the foregoing Amendment and Remarks that all of the objections and rejections in the final Office Action dated August 15, 2002, have been overcome and should be withdrawn. Accordingly, reconsideration and withdrawal of the outstanding rejections and allowance of claims 1-8, 19-31 and 40-83 is respectfully solicited and the Office is respectfully requested to pass this application to issue. If, in the opinion of the Office, a telephone conference would expedite the prosecution of the subject application, the Office is invited to call the undersigned attorney.

Respectfully submitted,



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**Version with Markings to Show Changes Made to the Claims  
as of June 25, 2003**

1. (Amended) A method of providing tooth whitening services to a plurality of clients by one dental professional, which comprises:

- (a) providing a tooth whitening module comprising at least two workstations, each workstation in the module being operated by the dental professional;
  - (b) assigning each client to a workstation of the module; and
  - (c) having the dental professional administer tooth whitening services to each client in each workstation of the module,
- wherein at least a portion of the tooth whitening procedure is provided to each client simultaneously.

40. (Amended) A method of administering tooth whitening services, comprising the steps of:

- (a) applying a whitening gel to all cosmetically visible teeth of a client; and
- (b) applying light to all of said teeth of said client simultaneously for a fixed period of time, and
- (c) repeating steps (a) and (b) two to five times.

41. (Amended) The method of claim 40, wherein steps (a) and (b) are repeated from about two to about five times, and wherein steps (a) – (c) are completed in less than about two hours.

48. (Amended) A method according to [claims] claim 40, wherein the whitening gel comprises from about 1% to about [15%] 35% hydrogen peroxide.

49. (Amended) A method according to [claims] claim 40, further comprising a step of comparing the shade of teeth to a desired shade on a shade guide.

54. (Amended) The method of claim 53, wherein the means of receiving contacts initiated by potential clients and informing said potential clients of locations where tooth whitening services can be [obtains is] obtained through a telephonic connection, a web site, email or written correspondence.